

Labor Market Information

Pinal County LWIA

Office of Employment and Population Statistics
Arizona Department of Administration

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AGENDA

- LMI in WIOA Local Plans
- Economic Overview
 - Local Demographics
 - Unemployment
 - Industry Growth
- Existing and Emerging In-Demand Industries and Occupations
- LMI Data Sources

Local Plans [Sec. 108 (b)]

– The local plan should include:

- An analysis of the regional economic conditions, including:
 - Existing and emerging in-demand industry sectors and occupations
 - The employment needs of employers in those industry sectors and occupations
- An analysis of the knowledge and skills needed to meet the employment needs of the employers in the region
- An analysis of the workforce in the region, including current labor force employment data, labor market trends, and the education and skill levels of the workforce in the region

LMI should also be included in:

Youth Workforce Investment [Sec. 129 (c)(2)(M)]

- Program elements including services that provide labor market information about in-demand industry sectors or occupations

Training Services [Sec. 134 (C)(3)(G)(iii)]

- Training Services should be directly linked to an in-demand industry sector or occupation in the local area

Career Services [Sec. 134 (e)(3)(A)(1)]

- (iv) Labor exchange services including:
 - (I). job search and placement assistance and career counseling including
 - (aa). information on in-demand industry sectors and occupations

Economic Overview

PINAL COUNTY LWIA

How to use data:

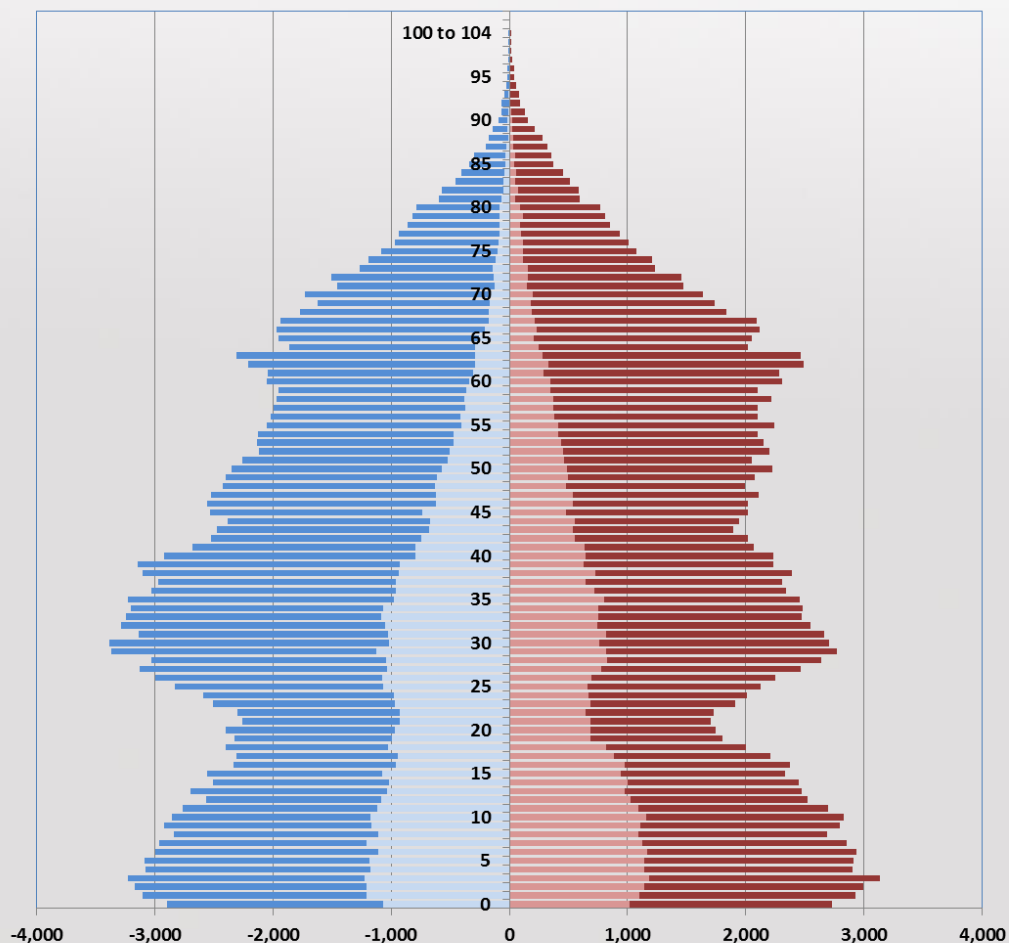
- **Use data to drive decision**, not validate decisions
- **Use more than one source of data** – don't lock yourself into a single estimate, consider all of the available data to get the most accurate picture
- **Know the limitations of your data set** – it's easy to accidentally misuse data and draw erroneous conclusions
- **Become familiar with different data sets (or someone who is)** – there is no one place to find all the data you need

Immerse yourself in the data

Be prepared to accept surprising surprises

Pinal County Population

Hispanic Male Hispanic Female Non-Hispanic Male Non-Hispanic Female



Pinal County

Census 2010

Total Population: 375,770

Hispanic

Male	57757	15.4%
Female	49220	13.1%

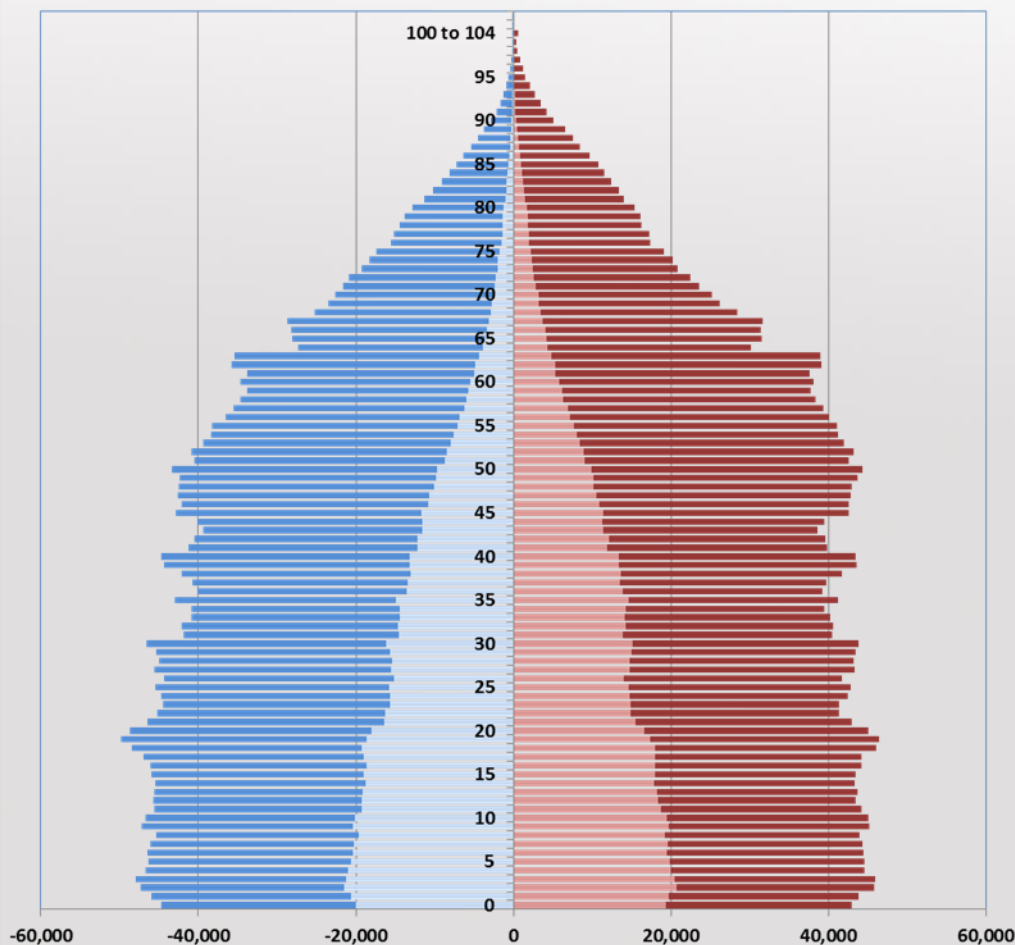
Non-Hispanic

Male	139408	37.1%
Female	129385	34.4%

Under 17	95,175	25.3%
Age 17 - 24	34,223	9.1%
Age 25 - 34	56,746	15.1%
Age 35 - 44	50,359	13.4%
Age 45 - 54	44,388	11.8%
Age 55 - 64	42,808	11.4%
Over 64	52,071	13.9%

Arizona Population

Hispanic Male Hispanic Female Non-Hispanic Male Non-Hispanic Female



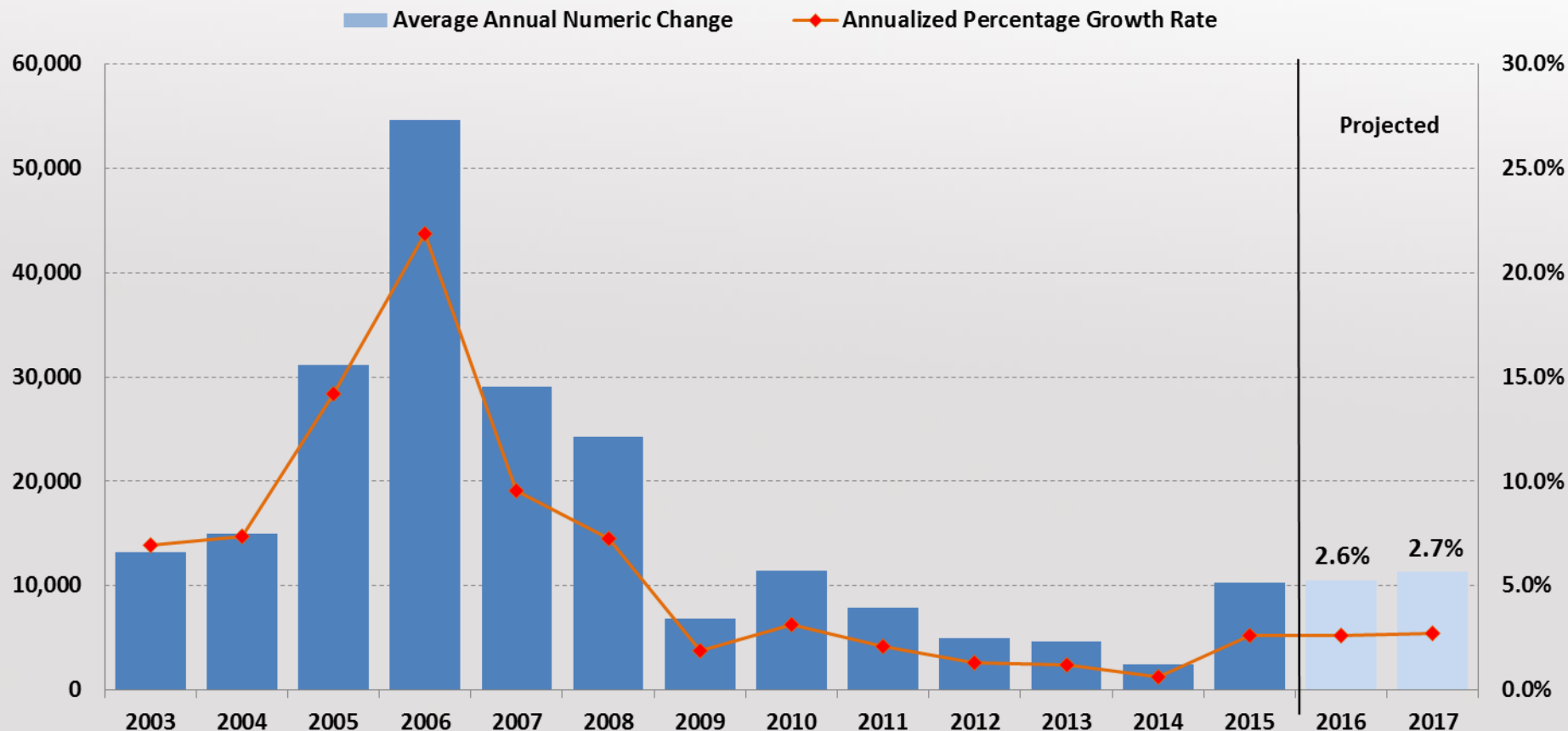
Arizona

Census 2010

Total Population: 6,392,017

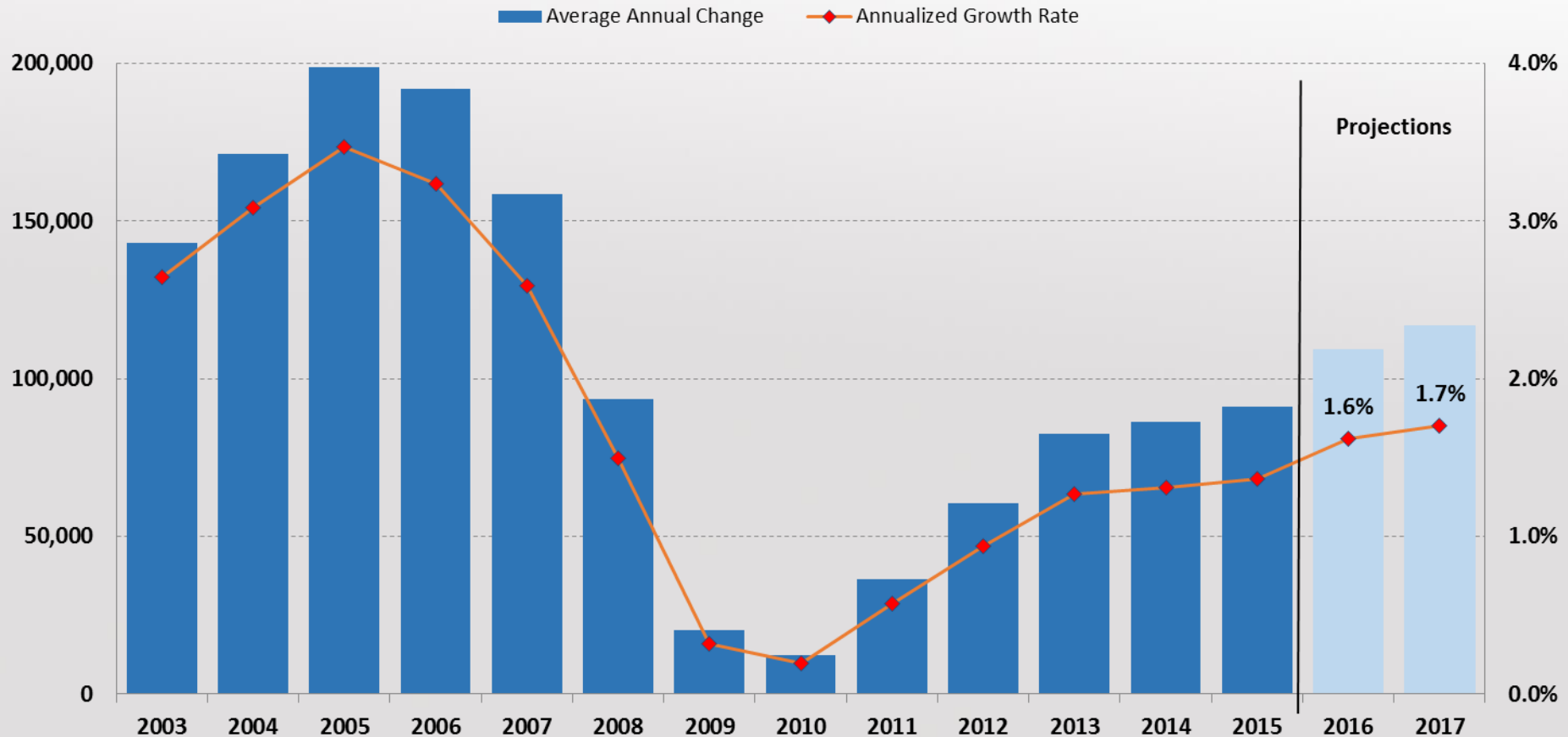
Hispanic	1,895,149	29.6%
Male	951,790	14.9%
Female	943,359	14.8%
Non-Hispanic	4,496,868	70.4%
Male	2,224,033	34.8%
Female	2,272,835	35.6%
Under 17	1,537,878	24.1%
Age 17 - 24	724,347	11.3%
Age 25 - 34	856,693	13.4%
Age 35 - 44	822,494	12.9%
Age 45 - 54	842,546	13.2%
Age 55 - 64	726,228	11.4%
Over 64	881,831	13.8%

Pinal County's Population Growth and Growth Rates



Source: Produced by the Arizona Office of Employment and Population Statistics using 2010 Census data in cooperation with the U.S. Census Bureau

Arizona's Population Growth and Growth Rates, 2003-2017



Source: Produced by the Arizona Office of Employment and Population Statistics using 2010 Census data in cooperation with the U.S. Census Bureau

Pinal County Quick Facts (2014)

	Pinal County	Arizona	United States
Median Household Income	\$50,248	\$49,928	\$53,482
Median Age	36.6	36.5	37.4
Individuals with a Disability Between 18-64	11.5%	9.9%	10.2%
Veterans	12.0%	10.0%	8.3%
Poverty Status	16.8%	18.2%	15.6%
Mean Travel Time to Work	31:18	24:42	25:42
Civilian Labor Force Participation Rate	50.9%	59.7%	63.5%
Population over 16	300,152	5,121,781	248,775,628

Source: Produced by the Arizona Office of Employment and Population Statistics using 2014 ACS 5-Year Estimates (DP03, S0501, S1810, S2101) in cooperation with the U.S. Census Bureau

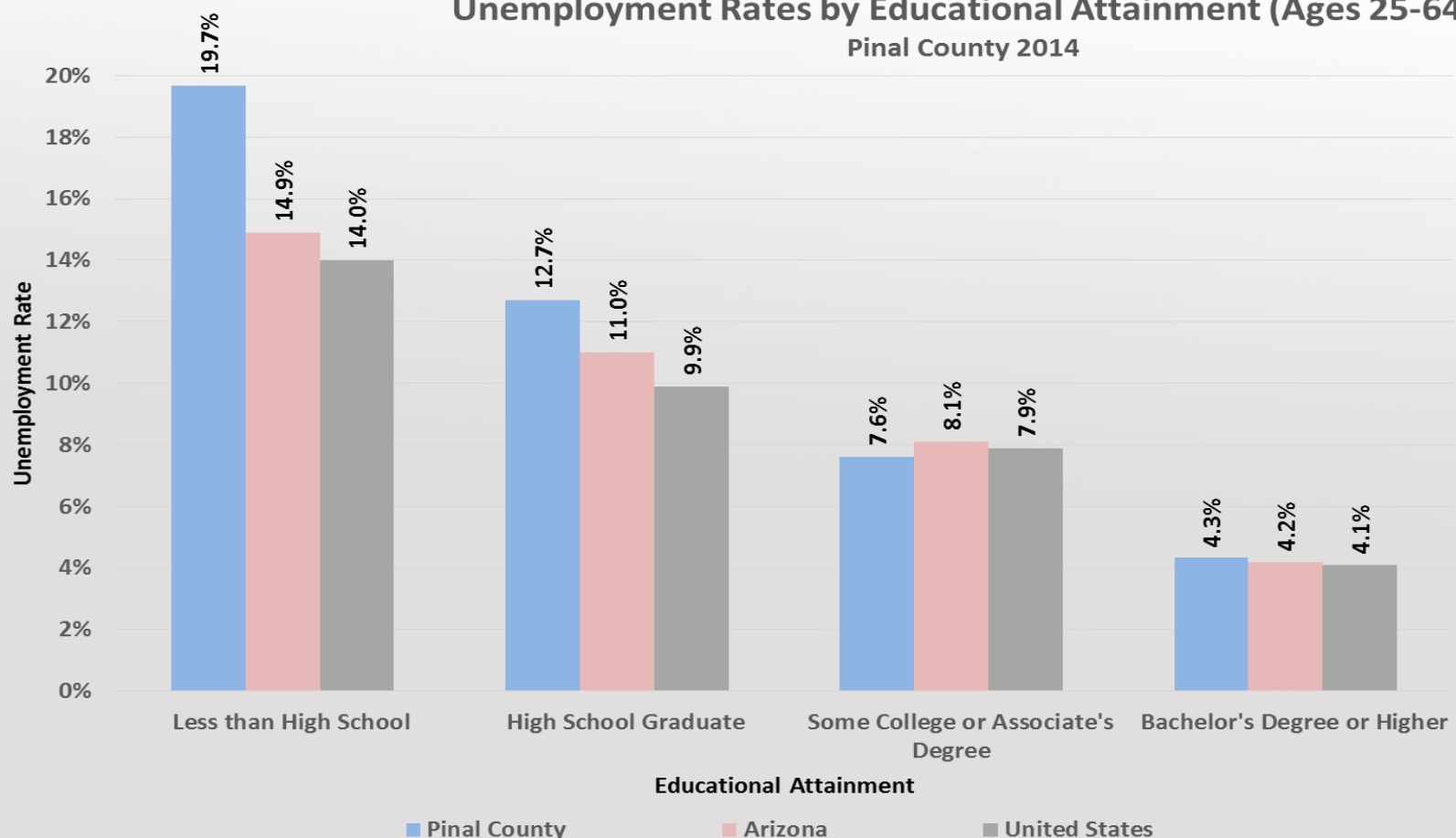
Highest Educational Level Achieved (Population over 25, 2014)

	Pinal County	Arizona	United States
Less than High School	15.0%	14.1%	13.6%
High School Graduate (includes equivalency)	57.8%	50.4%	49.2%
Associate's Degree	9.3%	8.4%	7.9%
Bachelor's Degree	11.8%	17.1%	18.3%
Graduate or Professional Degree	6.1%	10.0%	11.0%

Source: Produced by the Arizona Office of Employment and Population Statistics using 2014 ACS 5-Year Estimates (S1501) in cooperation with the U.S. Census Bureau

- Pinal County has a lower share of residents who have completed formal post-secondary educational degrees

Unemployment Rates by Educational Attainment (Ages 25-64)
Pinal County 2014



Source: Produced by the Arizona Office of Employment and Population Statistics using 2014 ACS 5-Year Estimates (B23006) in cooperation with the U.S. Census Bureau

- **Unemployment decreases with higher levels of education**
- **Unemployment is higher in Pinal County regardless of educational attainment, except jobs requiring an Associate's Degree**

Pinal County Public Assistance Households (2014)

	Pinal County	Arizona	United States
TANF (Temporary Assistance for Needy Families)	2.3%	2.5%	2.8%
SSI (Supplemental Security Income)	4.6%	4.2%	5.3%
SNAP (Supplemental Nutrition Assistance Program)	12.4%	13.6%	13.0%
Medicaid/AHCCCS (Arizona Health Care Cost Containment System) (Individuals)	20.8%	20.0%	17.8%

Source: Produced by the Arizona Office of Employment and Population Statistics using 2014 ACS 5-Year Estimates (DP03, S2701) in cooperation with the U.S. Census Bureau

Pinal County Health Insurance (2014)

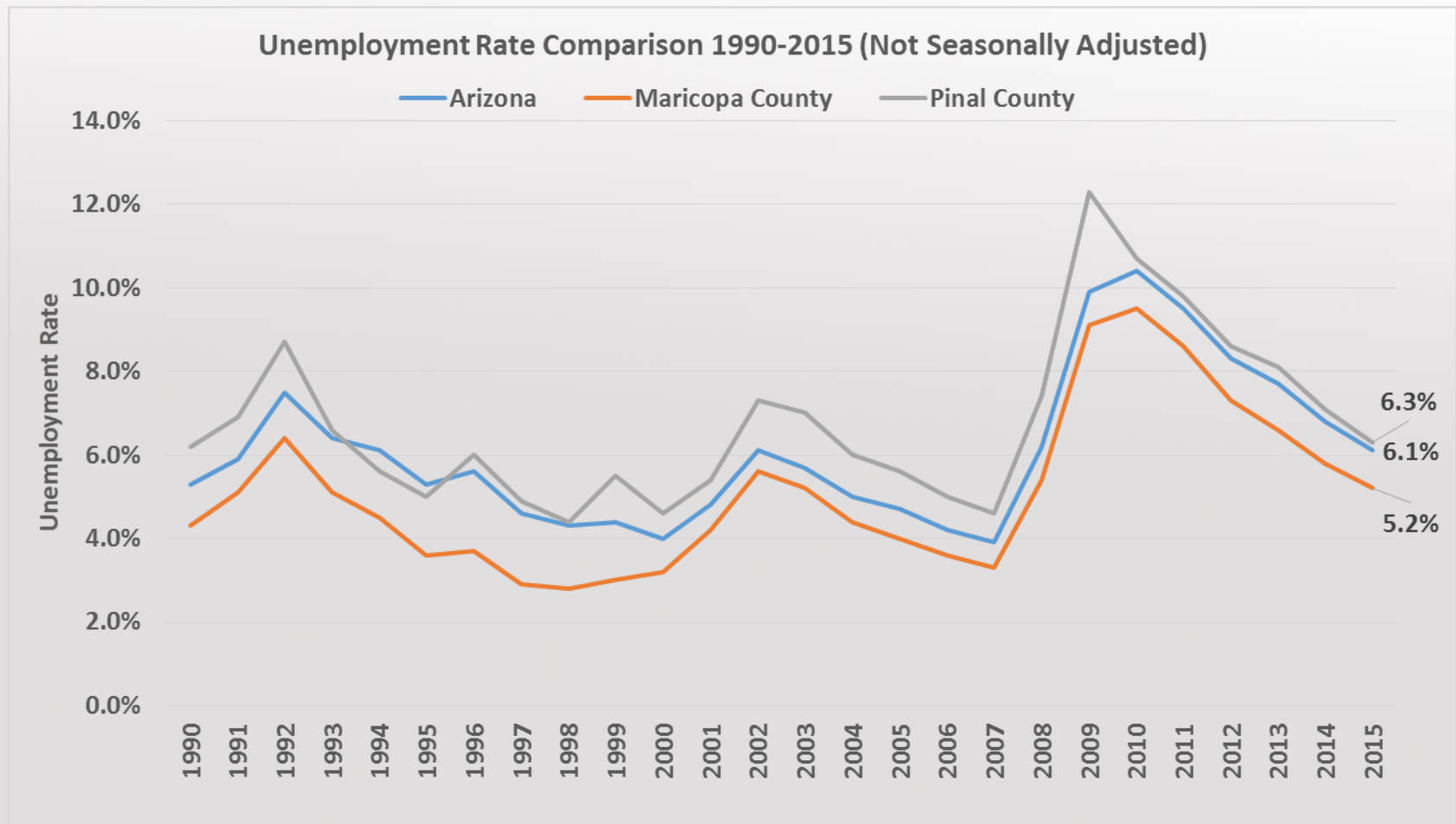
	Pinal County	Arizona	United States
Private Coverage Only (Employer, Direct-Purchase, TRICARE)	46.3%	47.0%	52.7%
Public Coverage Only (Medicare, AHCCCS, Veteran's Admin.)	21.9%	21.1%	17.6%
Both Private and Public Coverage (Some combination of the above, ex. Tricare for Life and Medicare)	17.3%	15.6%	15.5%
Uninsured	14.5%	16.3%	14.2%

Source: Produced by the Arizona Office of Employment and Population Statistics using 2014 ACS 5-Year Estimates (S2701) in cooperation with the U.S. Census Bureau

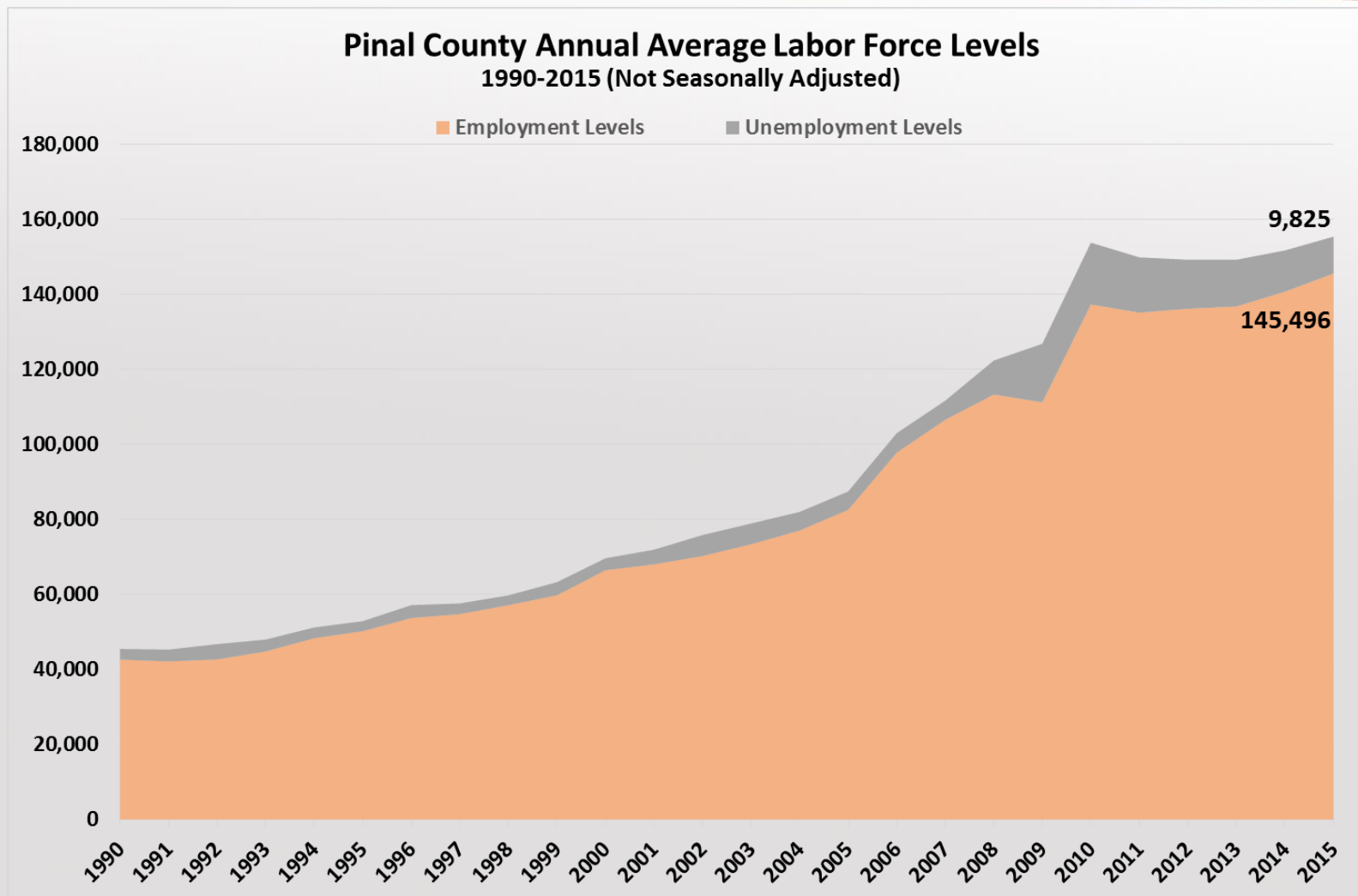
Pinal County Detailed Health Insurance (2014)

	Pinal County	Arizona	United States
Employment-based (private)	50.1%	48.7%	54.7%
Direct-purchase (private)	11.8%	12.5%	12.4%
TRICARE (private)	3.1%	3.2%	2.7%
Medicare (public)	18.7%	16.5%	15.5%
AHCCCS/Medicaid (public)	20.8%	20.0%	17.8%
VA (public)	3.3%	2.7%	2.1%
Uninsured	14.5%	16.3%	14.2%

Source: Produced by the Arizona Office of Employment and Population Statistics using 2014 ACS 5-Year Estimates (S2701) in cooperation with the U.S. Census Bureau



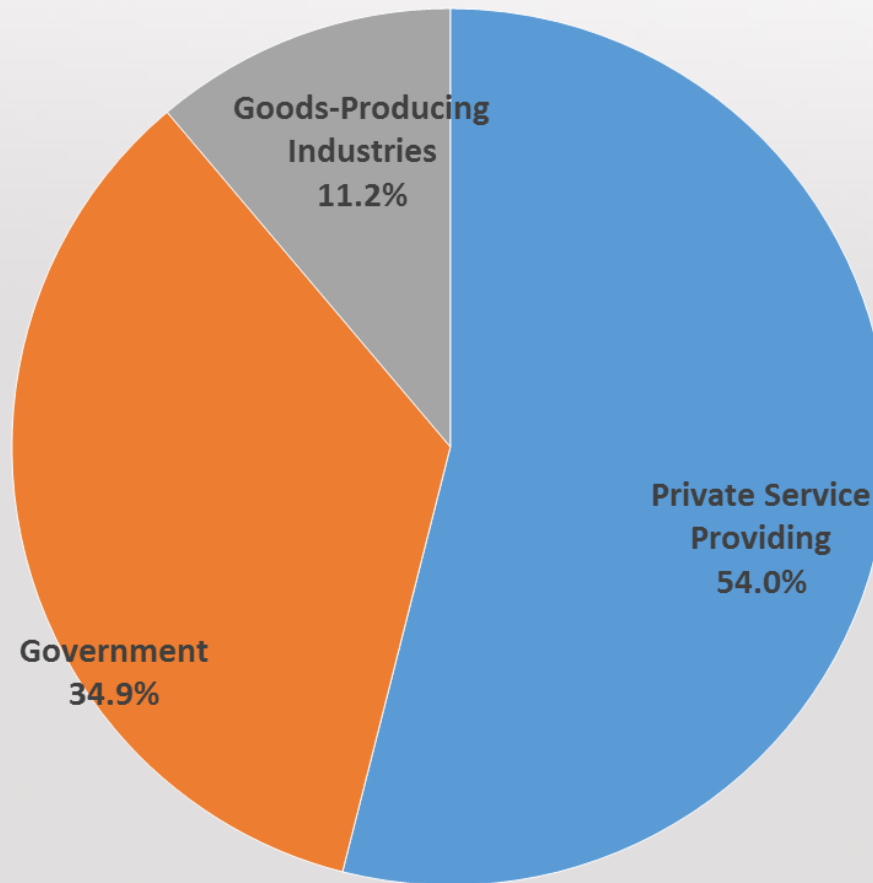
Source: Produced by the Arizona Office of Employment and Population Statistics using LAUS data in cooperation with the U.S. Dept. of Labor, Bureau of Labor Statistics



Source: Produced by the Arizona Office of Employment and Population Statistics using LAUS data in cooperation with the U.S. Dept. of Labor, Bureau of Labor Statistics

Pinal County Broad Industry Total Nonfarm Employment Share

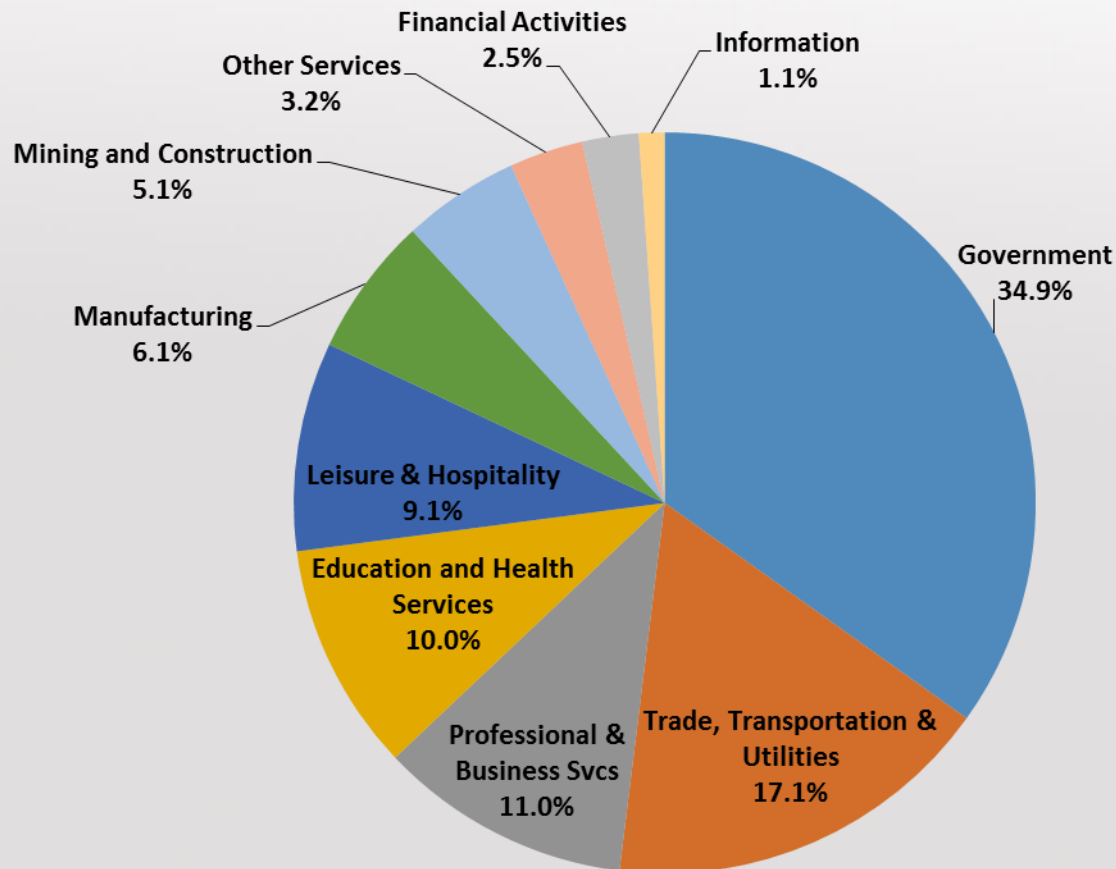
2015 Annual Average, Not Seasonally Adjusted



Source: Produced by the Arizona Office of Employment and Population Statistics using CES data in cooperation with the U.S. Dept. of Labor, Bureau of Labor Statistics

Pinal County Industry Nonfarm Employment Share

2015 Annual Average, Not Seasonally Adjusted



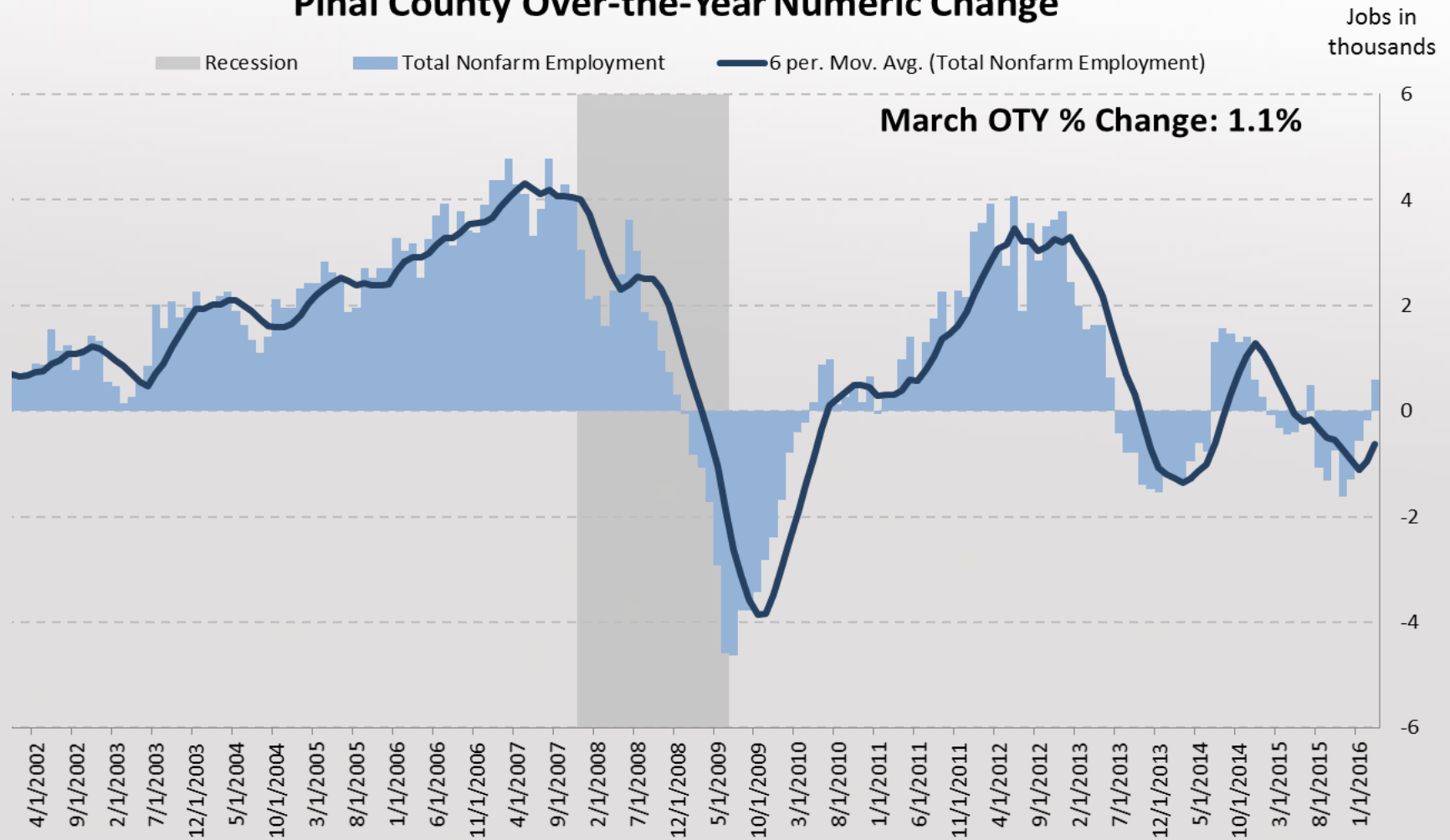
Source: Produced by the Arizona Office of Employment and Population Statistics using CES data in cooperation with the U.S. Dept. of Labor, Bureau of Labor Statistics

Pinal County Industry Nonfarm Employment Share 2001 & 2015 Annual Averages

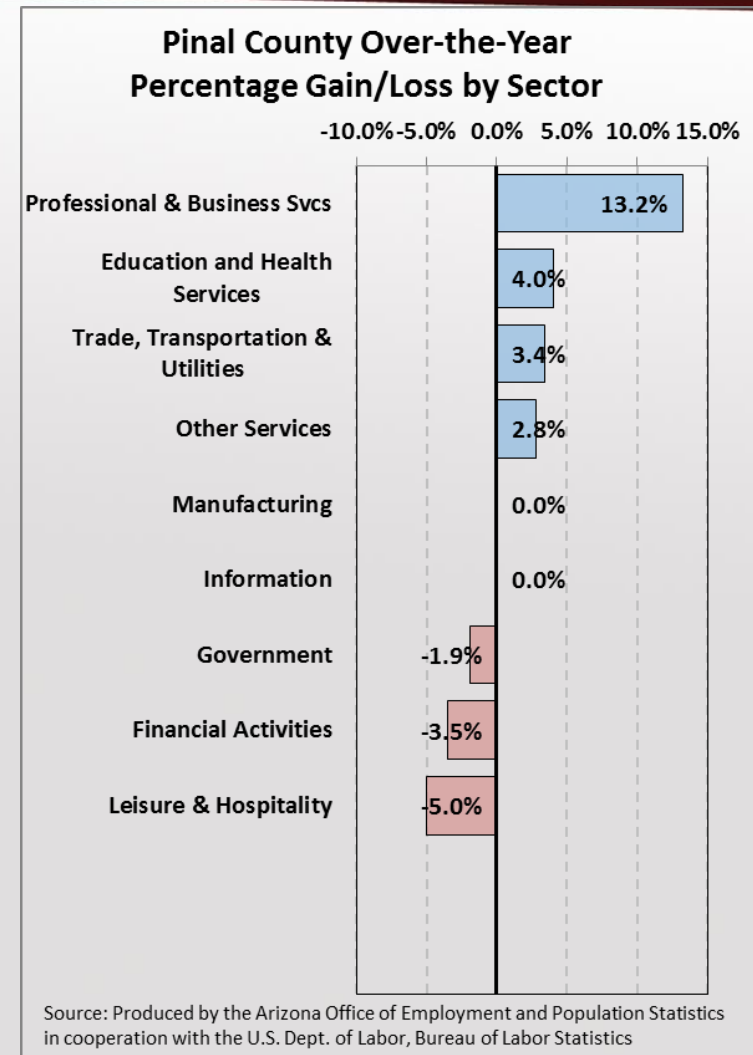
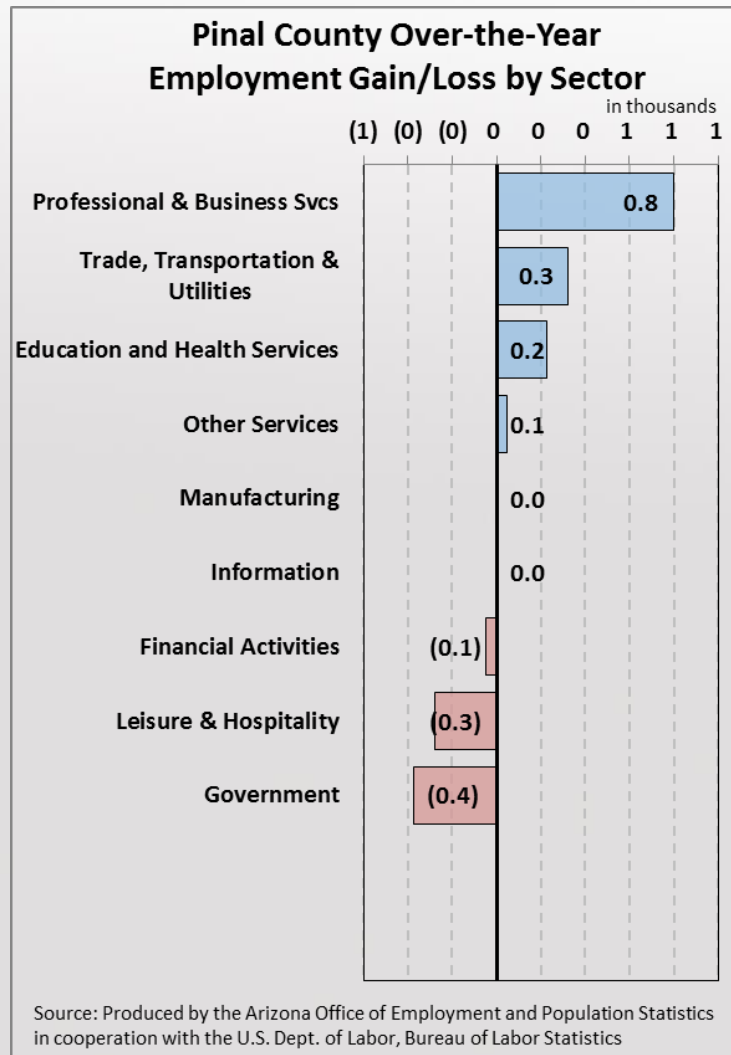
Industry	Employment Share		
	2001	2015	Change
Financial Activities	2.2%	2.5%	0.3%
Government	38.9%	34.9%	-4.0%
Information	0.8%	1.1%	0.3%
Leisure & Hospitality	7.8%	9.1%	1.3%
Manufacturing	7.5%	6.1%	-1.4%
Mining and Construction	7.6%	5.1%	-2.5%
Other Services	3.3%	3.2%	-0.1%
Professional & Business Svcs	8.4%	11.0%	2.6%
Trade, Transportation & Utilities	16.1%	17.1%	1.0%
Education and Health Services	7.5%	10.0%	2.4%
Total Nonfarm	100.0%	100.0%	0.0%

Source: Produced by the Arizona Office of Employment and Population Statistics using CES data in cooperation with the U.S. Dept. of Labor, Bureau of Labor Statistics

Pinal County Over-the-Year Numeric Change



Source: Produced by the Arizona Office of Employment and Population Statistics using CES data in cooperation with the U.S. Dept. of Labor, Bureau of Labor Statistics



Source: Produced by the Arizona Office of Employment and Population Statistics using LAUS data in cooperation with the U.S. Dept. of Labor, Bureau of Labor Statistics

Phoenix-Mesa-Glendale Short Term Industry Employment Projections 2015-2017

Industry Code	Industry Title	Base Employment 2015 Q2	Projected Employment 2017 Q2	Numeric Change	Percent Change
101100	Natural Resources and Mining	12,708	12,206	-502	-2.0%
101200	Construction	98,371	114,381	16,010	7.8%
101300	Manufacturing	118,377	119,631	1,254	0.5%
102100	Trade, Transportation, and Utilities	381,063	400,538	19,475	2.5%
102200	Information	36,959	39,614	2,655	3.5%
102300	Financial Activities	160,226	172,930	12,704	3.9%
102400	Professional and Business Services	311,711	340,905	29,194	4.6%
102500	Education and Health Services	381,456	403,800	22,344	2.9%
102600	Leisure and Hospitality	219,081	235,150	16,069	3.6%
102700	Other Services (Except Government)	51,249	52,737	1,488	1.4%
102800	Government	79,807	79,863	56	0.0%
102900	Unclassified	101,022	105,277	4,255	2.1%

Entire dataset available at: <https://laborstats.az.gov/employment-forecasts>

Source: Produced by the Arizona Office of Employment and Population Statistics using LAUS data in cooperation with the U.S. Dept. of Labor, Bureau of Labor Statistics

Total Employment by Substate Area Employment Change

	2015 Q2(a)	2017Q2(b)	Employment Change
Arizona	2,718,515	2,875,050	156,535
Phoenix MSA ₁	1,952,031	2,077,030	124,999
Tucson MSA ₂	370,866	385,259	14,393
Balance of State ₃	395,848	412,781	16,933

1) Maricopa and Pinal Counties

2) Pima County

3) Arizona less Maricopa, Pinal and Pima counties

a) Historical

b) Forecast

Source: Produced by the Arizona Office of Employment and Population Statistics using LAUS data in cooperation with the U.S. Dept. of Labor, Bureau of Labor Statistics

Total Employment by Substate Area

Annual Growth Rate (Compound)

	2013 Q3-2015 Q2(a)	2015 Q3- 2017Q2(b)
Arizona	2.41%	2.84%
Phoenix MSA ₁	2.90%	3.15%
Tucson MSA ₂	0.56%	1.92%
Balance of State ₃	1.84%	2.12%

1) Maricopa and Pinal Counties

2) Pima County

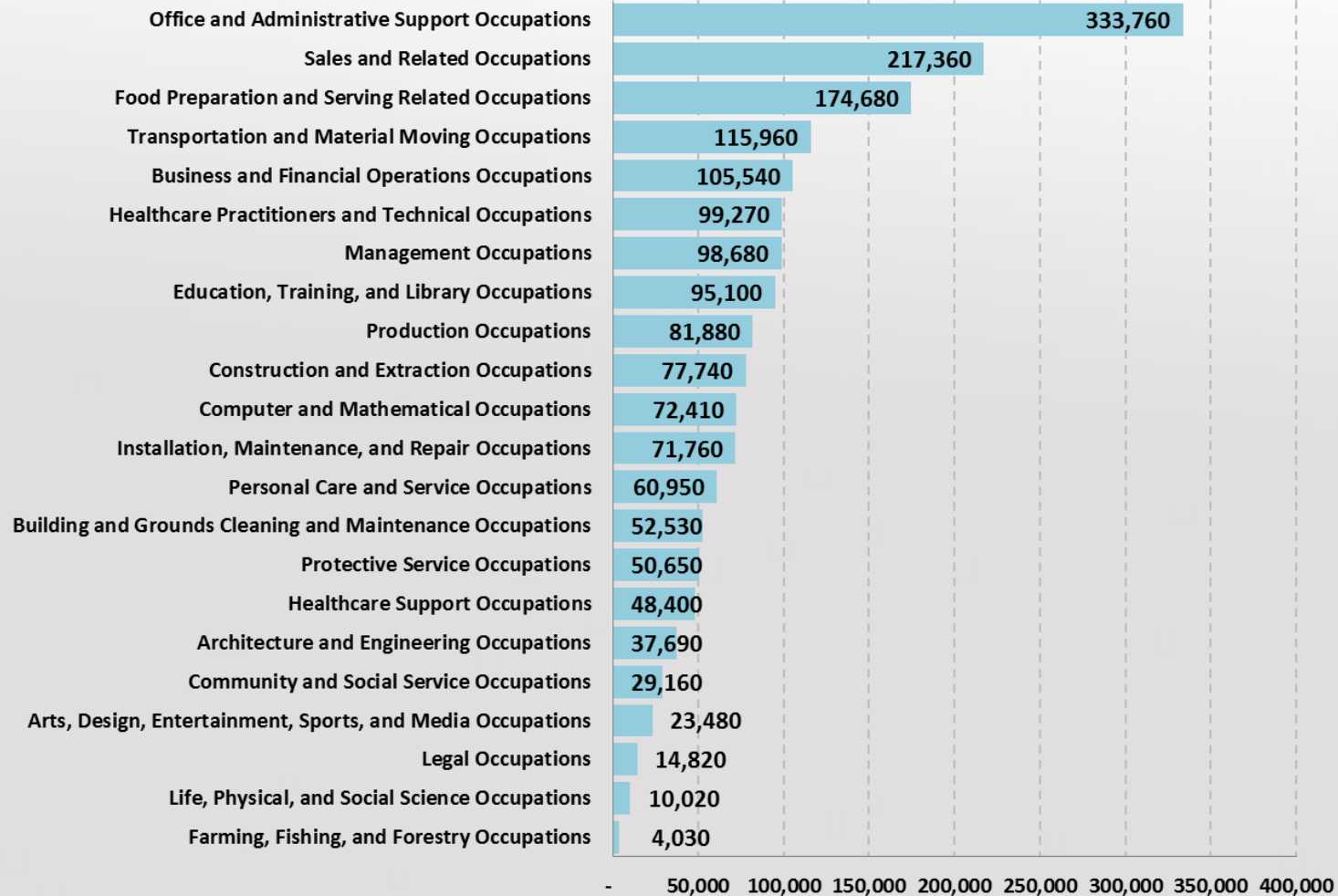
3) Arizona less Maricopa, Pinal and Pima counties

a) Historical

b) Forecast

Phoenix-Mesa-Scottsdale Metro Major Occupational Groups

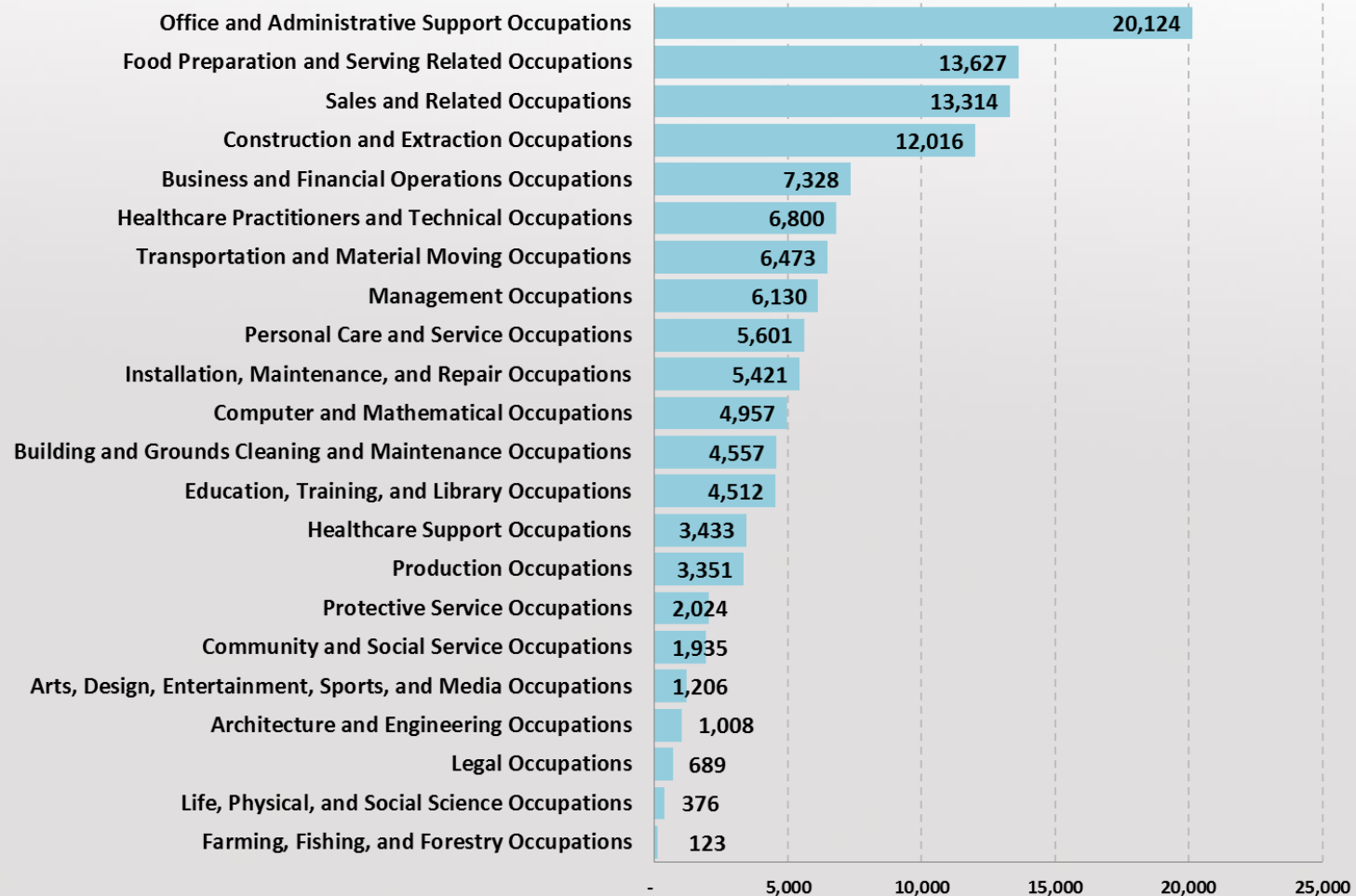
2015 Total Employment



Source: Produced by the Arizona Office of Employment and Population Statistics using LAUS data in cooperation with the U.S. Dept. of Labor, Bureau of Labor Statistics

Phoenix Metro Major Occupational Groups

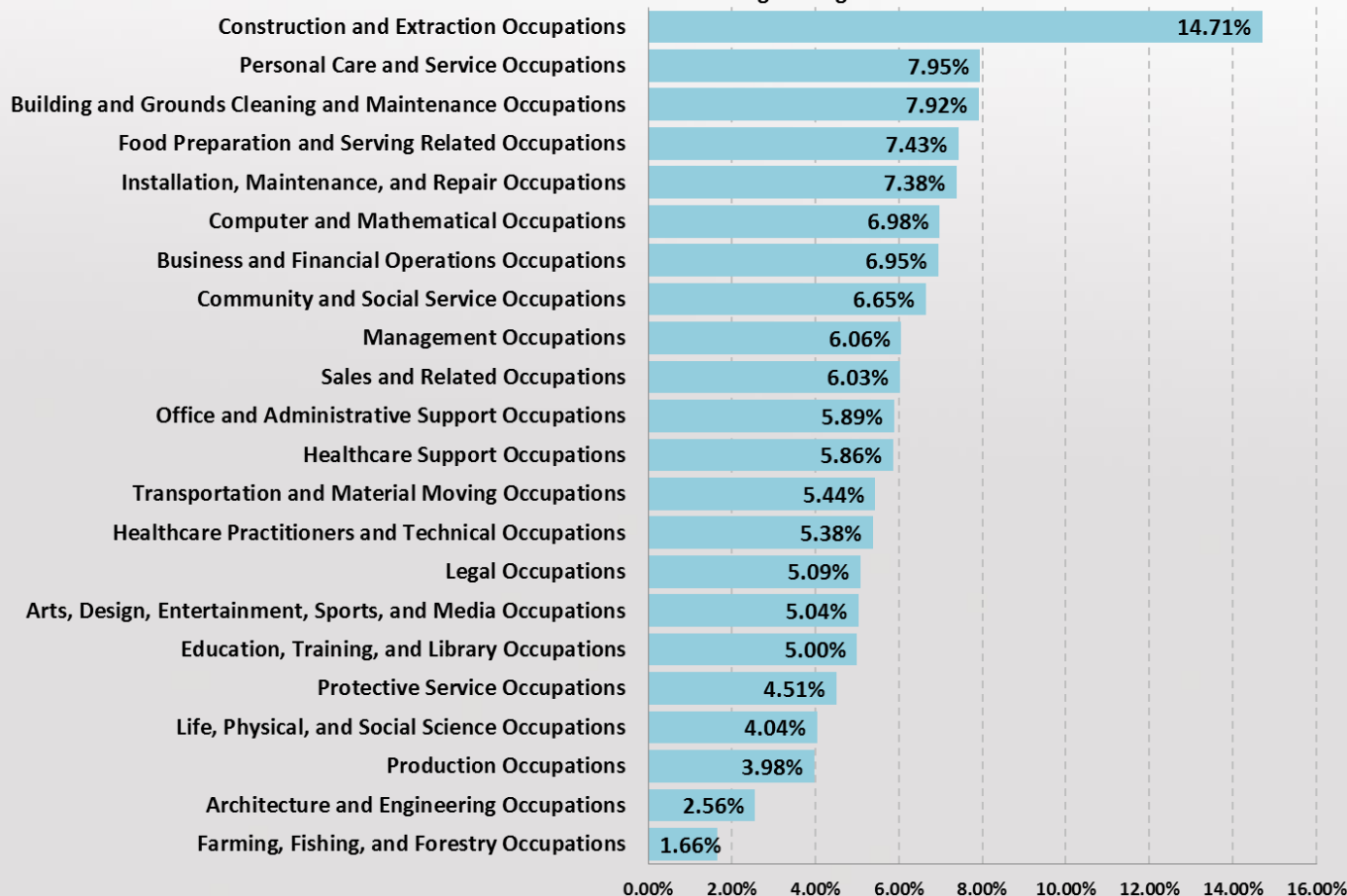
2015 - 2017 Total Numeric Change



Source: Produced by the Arizona Office of Employment and Population Statistics using OES data in cooperation with the U.S. Dept. of Labor, Bureau of Labor Statistics

Phoenix Metro Major Occupational Groups

2015 - 2017 Total Percentage Change

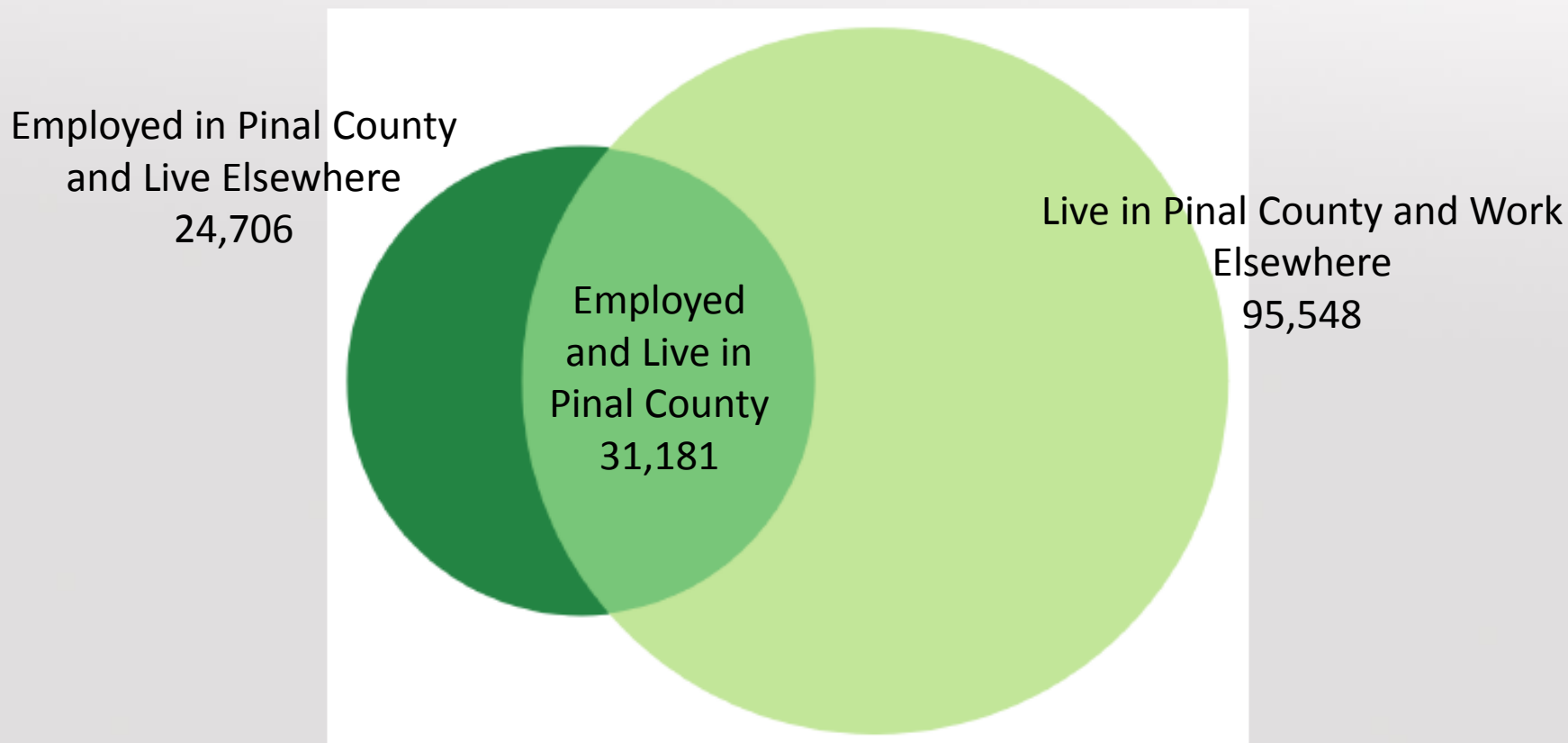


Entire dataset available at: <https://laborstats.az.gov/employment-forecasts>

Source: Produced by the Arizona Office of Employment and Population Statistics using OES data in cooperation with the U.S. Dept. of Labor, Bureau of Labor Statistics

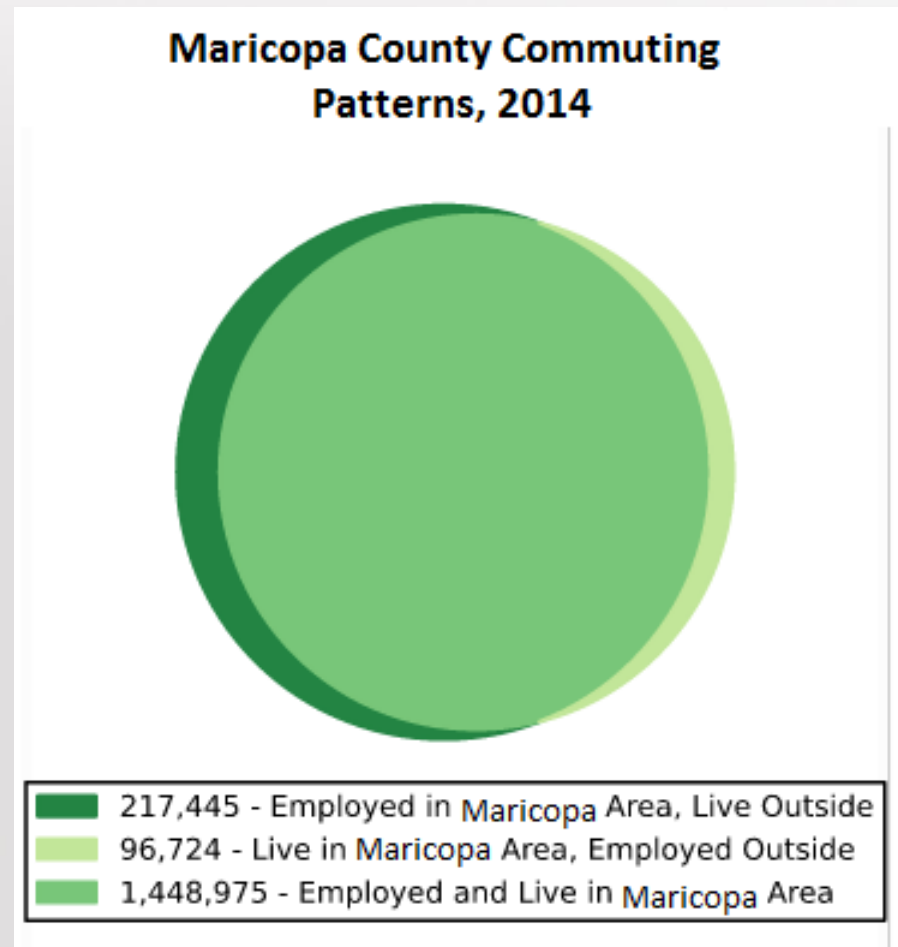
Pinal County Commuting Patterns

Pinal County 2014



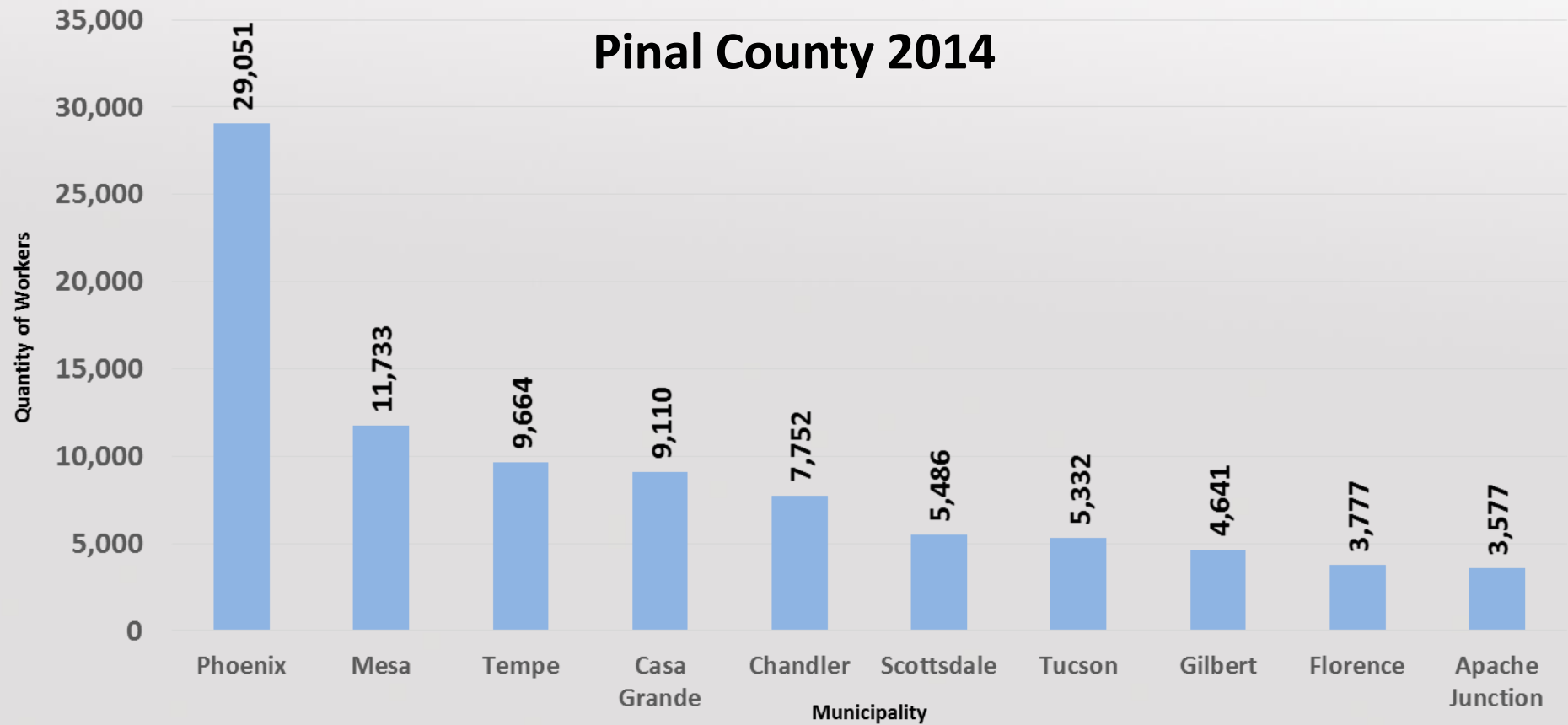
Source: Produced by the Arizona Office of Employment and Population Statistics using On The Map in cooperation with the U.S. Census Bureau

Compared with Maricopa County Commuting Patterns



Top 10 Cities of Employment for Pinal County Residents

Pinal County 2014



Source: Produced by the Arizona Office of Employment and Population Statistics using On The Map in cooperation with the U.S. Census Bureau

Existing and Emerging Demand Industries and Occupations

Methodology cont.

Labor market variables were given different weights depending on the importance of each variable when defining existing and emerging demand industry requirements

- **Existing demand industries** were identified as industries with large employment bases, above-average wages and high employment and wage location quotients
- **Emerging demand industries** were identified as industries with small employment levels and large short-term historic employment and wage growth

Location Quotient (LQ)

- A location quotient (LQ) is measurement of a region's industrial specialization relative to a larger geographic unit (usually the nation)
- It allows a subject area's distribution of employment by industry to be compared to a base area's distribution
 - Subject Area: Arizona, Maricopa County, Pima County, Etc.
 - Base Area: United States
- Allows comparison of relative employment and wage levels in the United States, states, counties, & MSAs

Location Quotient (LQ) Formula

Formula	Job Example	Percent	LQ
<div>Region</div> <div>Industry / Total</div>	<div>Region</div> <div>20 MFG jobs / 100 Total Jobs</div>	<div>Region</div> <div>20%</div>	= 2.0
<div>Nation</div> <div>Industry / Total</div>	<div>Nation</div> <div>100,000 MFG Jobs / 1,000,000 Total Jobs</div>	<div>Nation</div> <div>10%</div>	

Location Quotient Calculated

How to interpret:

- $LQ = 1$: The industry has the same share of employment/wages as the reference area
- $LQ > 1$: The industry has a higher share of employment/wages as the reference area
- $LQ < 1$: The industry has a lower share of employment/wages as the reference area

Example: an LQ of 1.0 in mining means that the region and the nation are equally specialized in mining; while an LQ of 1.8 means that the region has a higher concentration in mining than the nation.

Model Weighting Structure

Pinal County

Existing Demand Industry Detail

Variables	Weight	Constraints	Detail	Period
Average Employment Level	2	Top 33%	3-Digit Industry	2014-2015
Average Weekly Wage Level	3	Top 50%	3-Digit Industry	2014-2015
Employment Growth Numeric	1	na	3-Digit Industry	2014-2015
Employment Growth Percentage	1	na	3-Digit Industry	2014-2015
Average Wage Growth Numeric	1	na	3-Digit Industry	2014-2015
Average Wage Growth Percentage	1	na	3-Digit Industry	2014-2015
Employment Location Quotient	2	na	3-Digit Industry	2014-2015
Wage Location Quotient	2	na	3-Digit Industry	2014-2015
Employment Growth Numeric	1	na	2-Digit Super Sector	2011-2015
Employment Growth Percentage	1	na	2-Digit Super Sector	2011-2015
Employment Share Change	1	na	2-Digit Super Sector	2011-2015
Projected Employment Growth Numeric	1	na	2-Digit Super Sector	2012-2022
Projected Employment Growth Percentage	1	na	2-Digit Super Sector	2012-2022

Existing and Emerging Demand Industries were selected based on thirteen employment characteristics

Industries were ranked by each economic variable individually and then averaged together to calculate an overall industry ranking

Pinal County

Existing Demand Industry Detail

VARIABLE RANKINGS

Overall Rank	3-Digit NAICS Industry	Average Employment Level	Average Weekly Wage Level	Employment Growth	Average Wage Growth	Employment Location Quotient	Wage Location Quotient
1	NAICS 561 Administrative and support services	1	4	5	1	3	2
2	NAICS 311 Food manufacturing	5	1	2	2	2	1
2	NAICS 621 Ambulatory health care services	2	5	3	4	4	4
4	NAICS 541 Professional and technical services	4	3	1	3	5	5

Economic data are available to reference for each existing and emerging demand industry identified

Economic data is provided at the two- and three-digit industry NAICS code; depending on the available detail of the data used

Pinal County

Existing Demand Industry Detail

NAICS 561 Administrative and support services

Average Employment Level <i>(3-Digit Industry; 2014-2015)</i>	4,783
Average Weekly Wage Level <i>(3-Digit Industry; 2014-2015)</i>	\$770
Employment Growth <i>(3-Digit Industry; 2014-2015)</i>	-0.4%
Average Wage Growth <i>(3-Digit Industry; 2014-2015)</i>	4.7%
Employment Location Quotient <i>(3-Digit Industry; 2014-2015)</i>	1.4
Wage Location Quotient <i>(3-Digit Industry; 2014-2015)</i>	1.5
Employment Growth <i>(2-Digit Super Sector; 2011-2015)</i>	6.9%
Employment Share Change <i>(2-Digit Super Sector; 2011-2015)</i>	1.6%
Projected Employment Growth <i>(2-Digit Super Sector; 2012-2022)</i>	4.9%

Existing Demand Occupations

Pinal County

Existing Demand Industry Detail

NAICS 561 Administrative and support services

Rank	Occupation Title	Industry Employment Share
1	Registered Nurses	1.0%
2	Carpenters	0.8%
3	Assemblers and Fabricators, All Other	1.0%
4	Computer Systems Analysts	0.2%
5	First-Line Supervisors of Construction Trades and Extraction Workers	0.2%

Top occupations within each industry were identified by wage, employment growth and employment share characteristics

Pinal County

Existing Demand Occupation Detail

Registered Nurses

SOC Code	29-1141
Education Requirement	Associate's degree
Work Experience Requirement	None
On-the-Job Training Requirement	None
Knowledge Requirement	Psychology
Skill Requirement	Social Perceptiveness
Ability Requirement	Problem Sensitivity
Employment Level <i>(6-Digit SOC Code; 2014)</i>	840
Average Hourly Wage <i>(6-Digit SOC Code; 2014)</i>	\$33.6
Projected Employment Growth <i>(2-Digit Super Sector; 2012-2022)</i>	6.8%
Industry Employment Share <i>(6-Digit SOC Code; 2014)</i>	0.98%

Occupation requirements are provided to identify the needs of employers

Data Sources

LaborStats.az.gov

Employment Data:

laborstats.az.gov/employment

Unemployment Data:

laborstats.az.gov/unemployment

Wage & Income Data:

laborstats.az.gov/wages-income

Employment Projections Data:

laborstats.az.gov/employment-forecasts

Population Data:

laborstats.az.gov/population

Other Labor Market Sources

Commuting Patterns Data:

On the Map: onthemap.ces.census.gov/

Demographics Data:

American Community Survey: census.gov/programs-surveys/acs/

Personal Income & State GDP Data:

US Bureau of Economic Analysis: bea.gov/regional/index.htm

Interactive Employment Mapping:

Maricopa Association of Governments: <http://geo.azmag.gov/maps/azdemographics/>

Skills and Training Requirement Data:

O*NET: onetonline.org/find/descriptor/browse

Contact Information

Website: <https://laborstats.az.gov>

Phone: 602.771.2222

General Email: labor.info@azstats.gov

Doug Walls Email: doug.walls@azdoa.gov